

Shenzhen Qixin Tongda Technology Co., Ltd

Antenna test data report

Client: YIBOTONG

project: S85B5

G2/3/5/8+W1/2/5/8

FDD-2/3/4/5/7/12/17/28AB

Engineering: FU LIANGCHENG (137 6016 7811)

date: 2025-08-28

Factory address: Bao'an District, Shenzhen, Shajing Street, Shayi North

Yongfa Science and Technology Park, the first third floor

1. Test Project

	Test Project	Equipment
1. S Parameter	1. Return Loss (RL) 2. VSWR	Network Analyzer: Agilent 5071B
2. RF Test (2/3/4/5G)	1. power 2. level 3. TRP/TIS	Comprehensive Test: SP9500/CMW500/8960 Test Environment: Anechoic Chamber

2. Test Equipment



Agilent 5071B (S Parameter (RL/VSWR) Test Equipment)



Agilent 8960 (2G/3G Test Equipment)

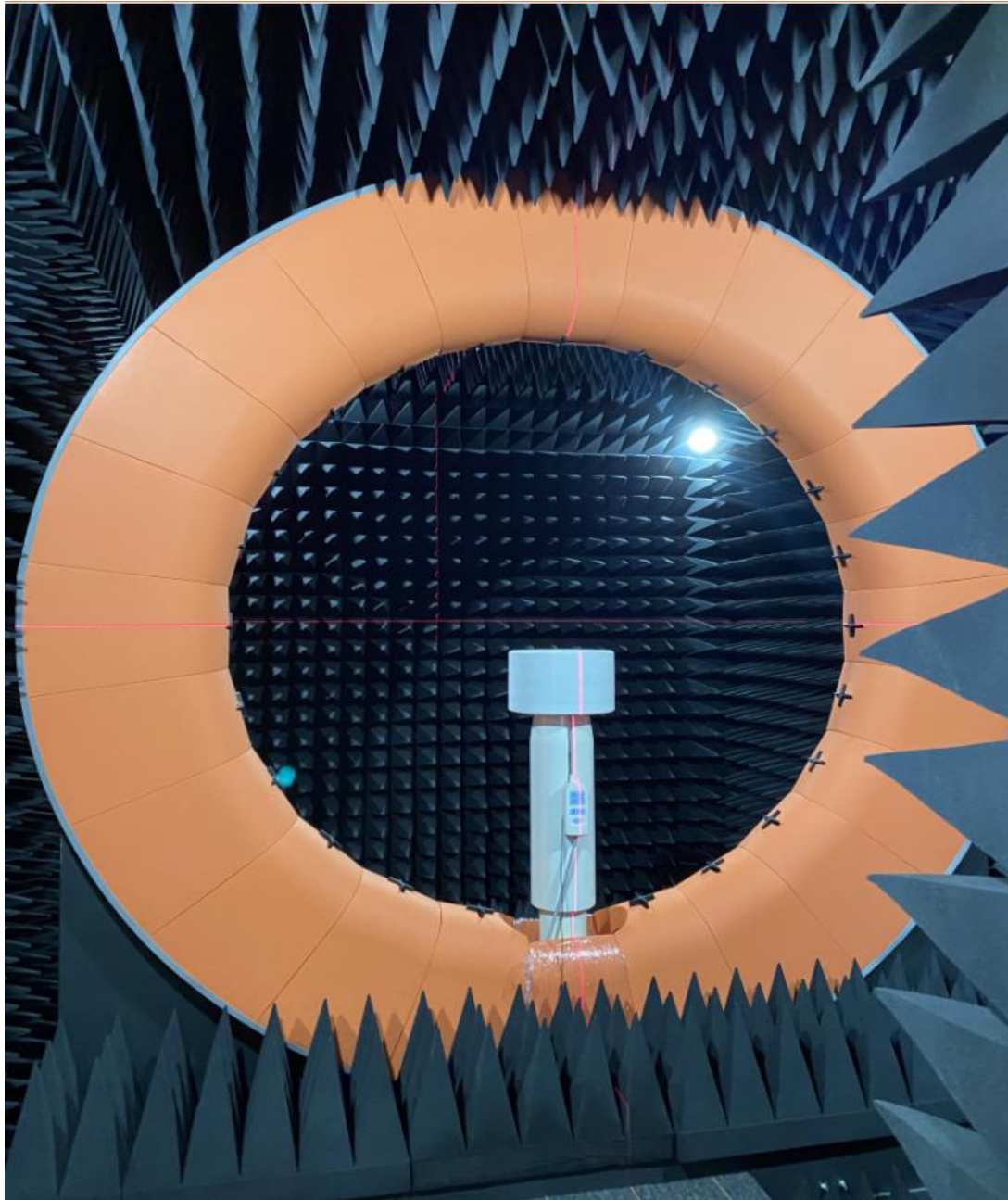


CMW 500 (2G/3G/4G Test Equipment)



SP9500 (5G Test Equipment)

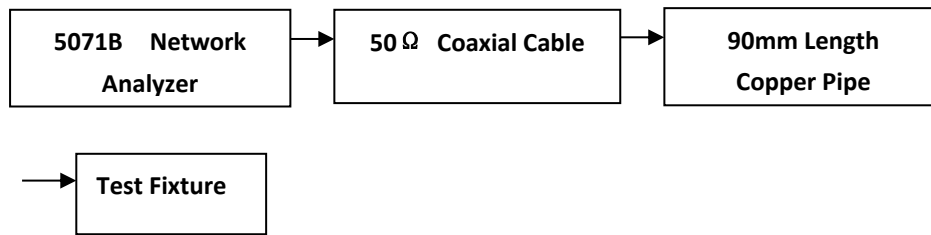
3. TestEnvironment



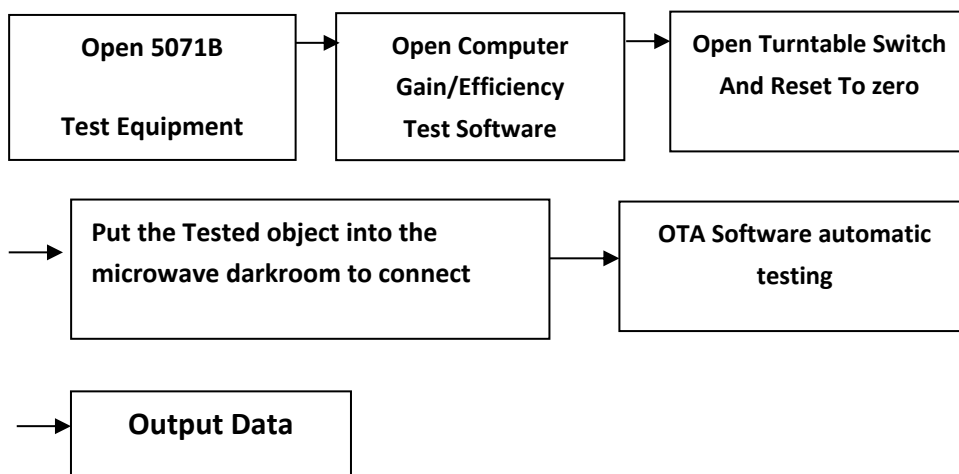
Microwave Anechoic Chamber

4.Test Steps

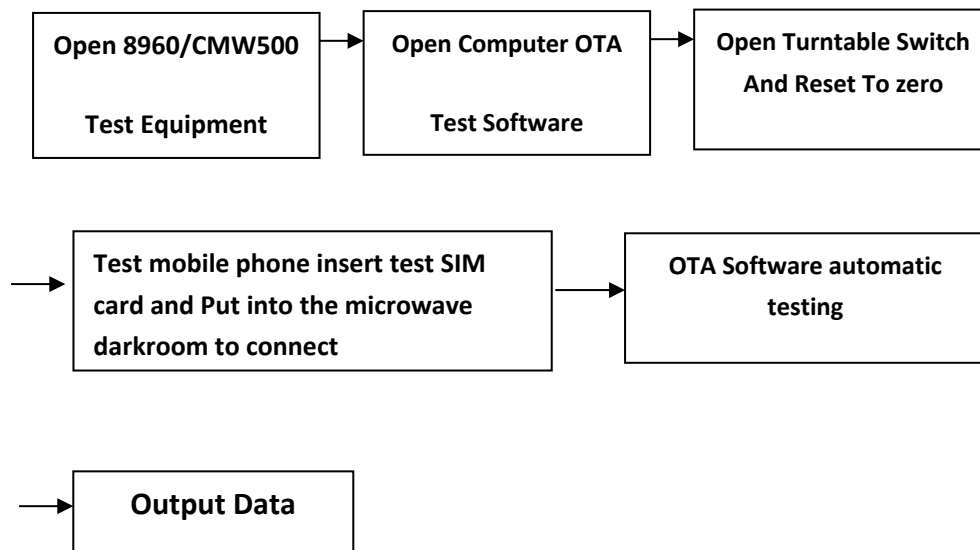
Passive VSWR/RL Test Steps:



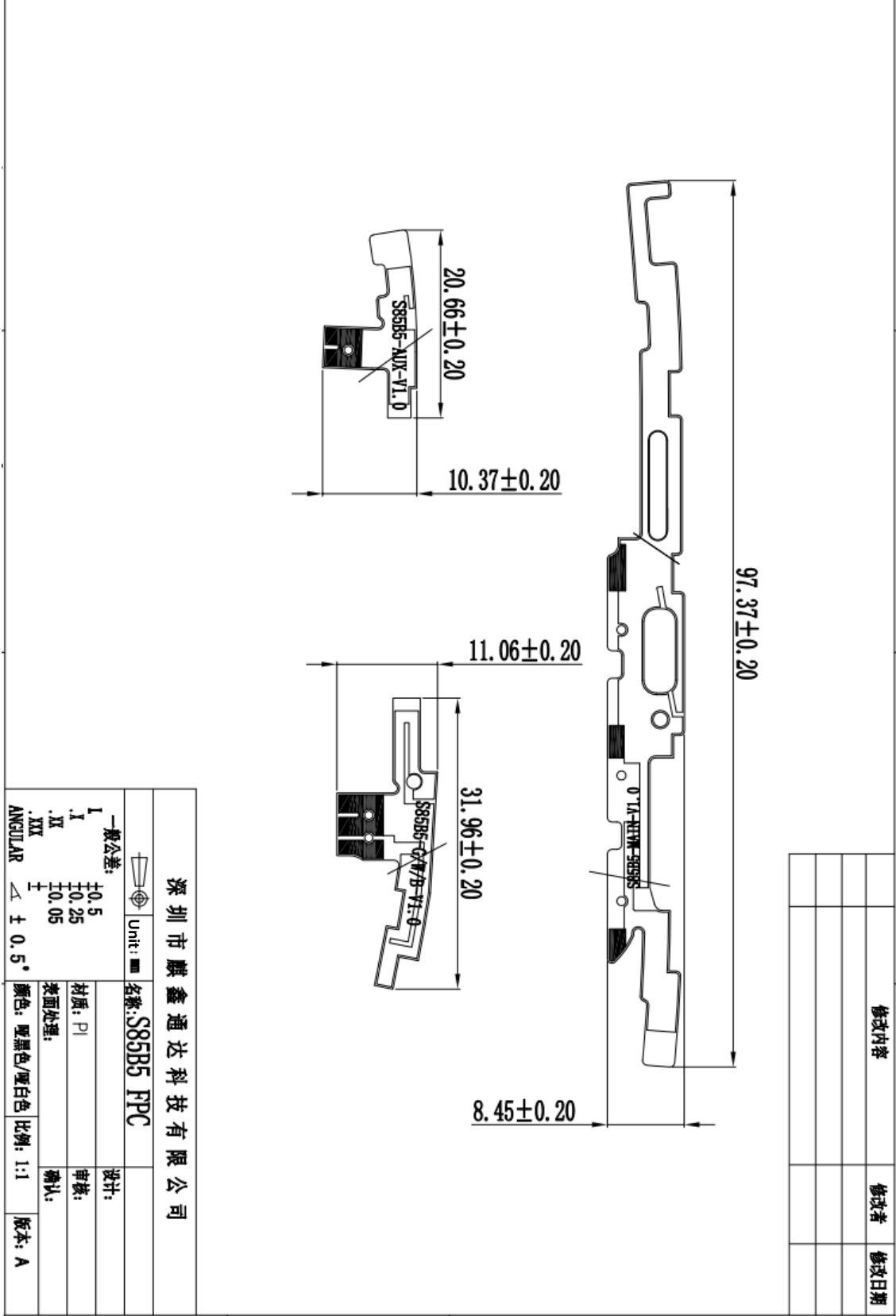
Gain/Efficiency Test Steps:



Active TRP/TIS Test Steps:



5. Antenna size diagram



6. Antenna Gain

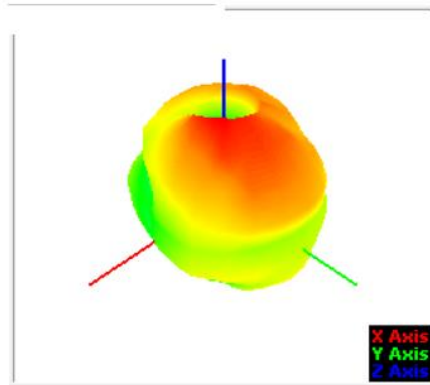
Frequency Band	Gain (dBi)
GSM850 (824-894MHz)	-2.30
GSM900 (880-960MHz)	-1.21
DCS1800 (1710-1880MHz)	0.20
PCS1900 (1850-1990MHz)	0.16
WCDMA850 (824-894MHz)	-2.30
WCDMA900 (880-960MHz)	-1.21
WCDMA1900 (1850-1990MHz)	0.16
WCDMA2100 (1920-2170MHz)	0.18
FDD B 2 (1850-1990MHz)	0.16
FDD B 3 (1710-1880MHz)	0.21
FDD B 4 (1710-2155MHz)	0.22
FDD B 5 (824-894MHz)	-2.26
FDD B 7 (2500-2690MHz)	0.35
FDD B 12 (699-746MHz)	-2.47
FDD B 17 (704-746MHz)	-2.46
FDD B 28 (703-803MHz)	-2.40
Bluetooth	-1.78
WIFI-2.4G	-1.78
WIFI-5G	0.73
GPS	0.26

8.2D&3D Lobe Diagram

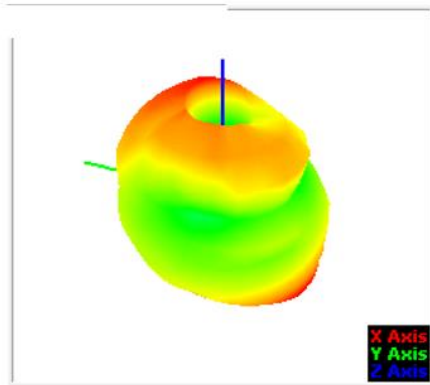
GSM850



-2.85
-8.37
-13.84
-19.32
-24.8
-30.27
-35.75
-41.22
-46.7
-52.18
-57.65
-63.13
-68.61
-74.08
-79.56
-85.04
-90.51
-95.99



X Axis
Y Axis
Z Axis

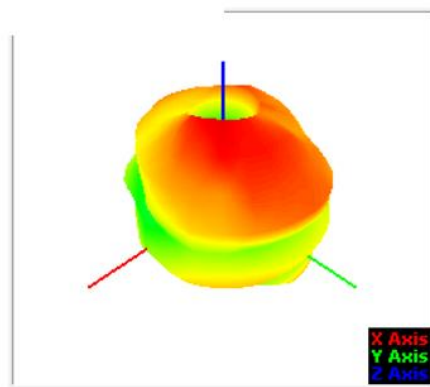


X Axis
Y Axis
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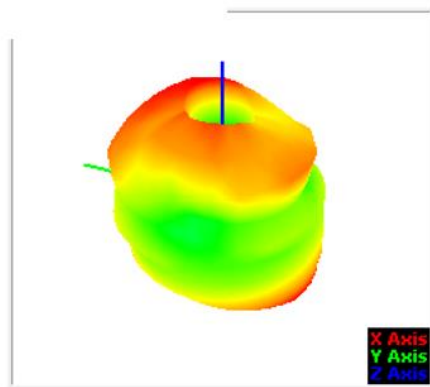
GSM900



-2.46
-8.08
-13.58
-19.07
-24.57
-30.06
-35.55
-41.05
-46.54
-52.04
-57.53
-63.03
-68.52
-74.01
-79.51
-85
-90.5
-95.99



X Axis
Y Axis
Z Axis

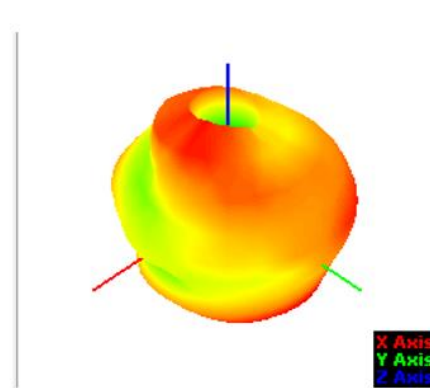


X Axis
Y Axis
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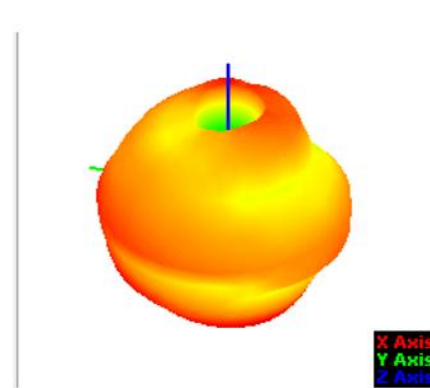
DSC1800



-0.65
-6.58
-12.16
-17.75
-23.34
-28.93
-34.52
-40.11
-45.69
-51.28
-56.87
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-79.22
-84.81
-90.4
-95.99



X Axis
Y Axis
Z Axis

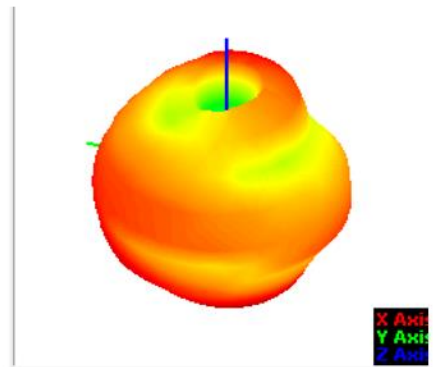
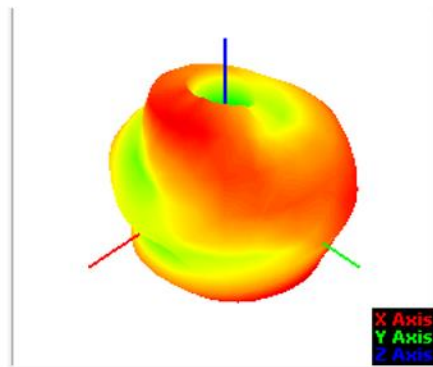


X Axis
Y Axis
Z Axis

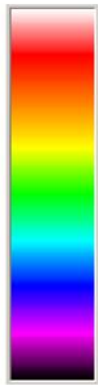
PCS1900



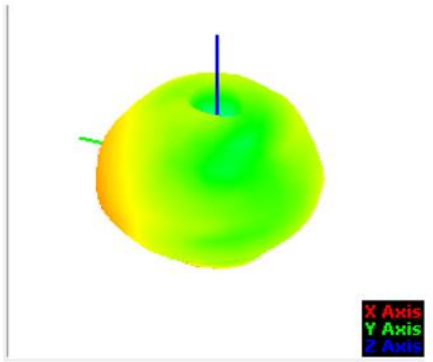
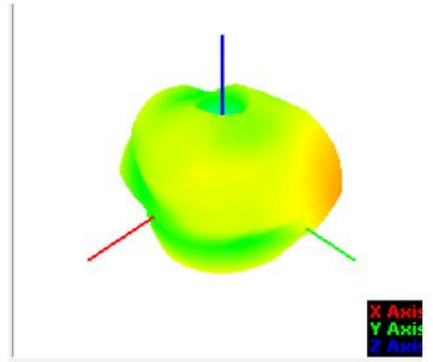
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-5.82
-11.46
-17.09
-22.73
-28.36
-34
-39.63
-45.27
-50.91
-56.54
-62.18
-67.81
-73.45
-79.08
-84.72
-90.35
-95.99



W1



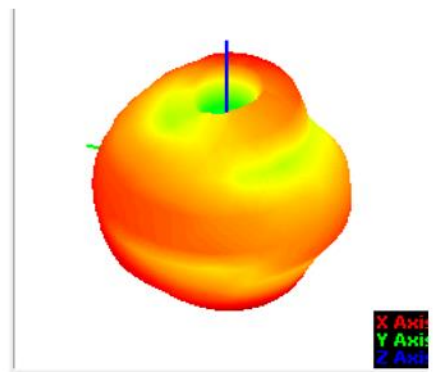
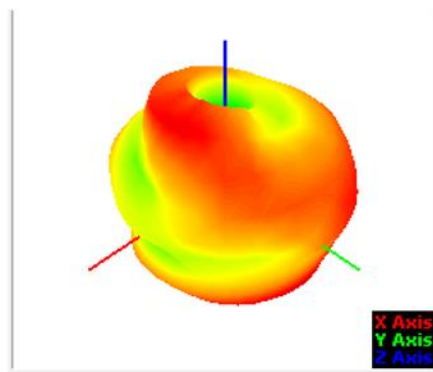
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-11.04
-16.7
-22.36
-28.03
-33.69
-39.35
-45.02
-50.68
-56.34
-62.01
-67.67
-73.34
-79
-84.66
-90.33
-95.99



W2



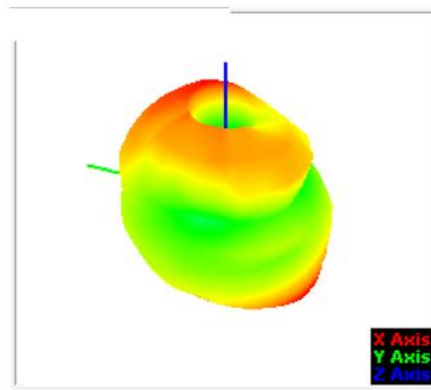
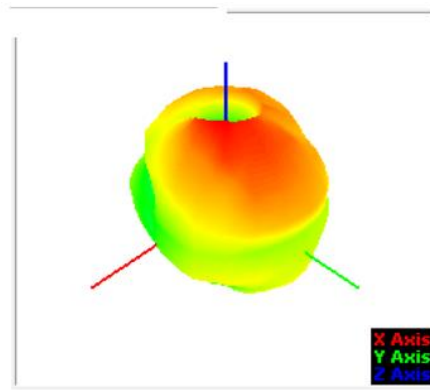
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-34
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-62.18
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-73.45
-79.08
-84.72
-90.35
-95.99



W5



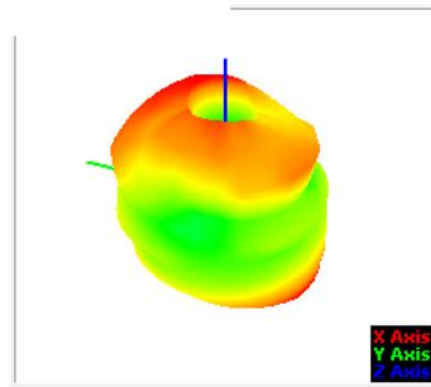
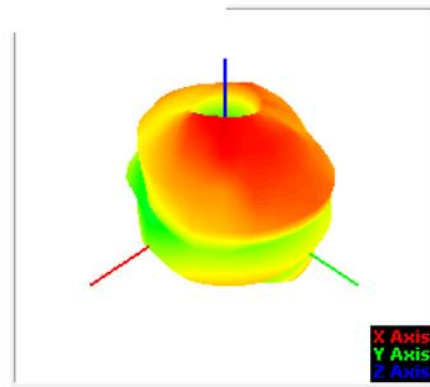
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-13.84
-19.32
-24.8
-30.27
-35.75
-41.22
-46.7
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-63.13
-68.61
-74.08
-79.56
-85.04
-90.51
-95.99



W8



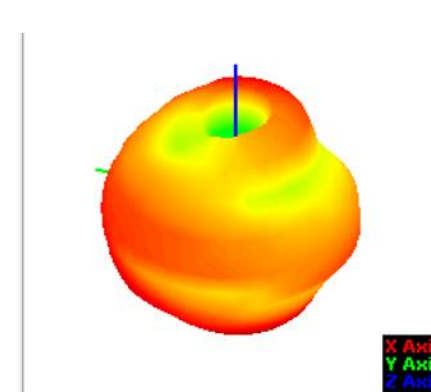
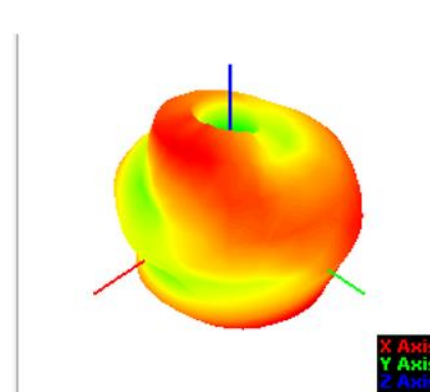
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-35.55
-41.05
-46.54
-52.04
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-63.03
-68.52
-74.01
-79.51
-85
-90.5
-95.99



FDD-B2



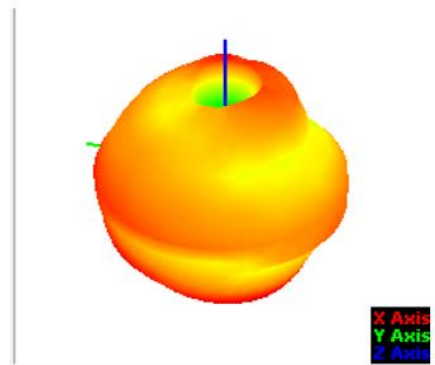
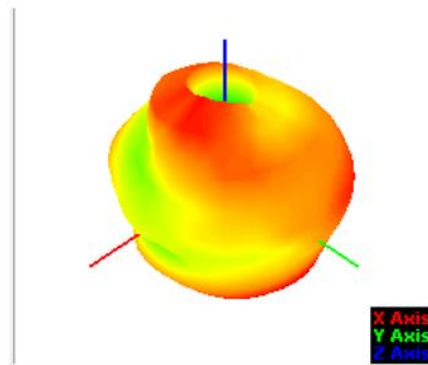
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-28.36
-34
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-45.27
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-62.18
-67.81
-73.45
-79.08
-84.72
-90.35
-95.99



FDD-B3



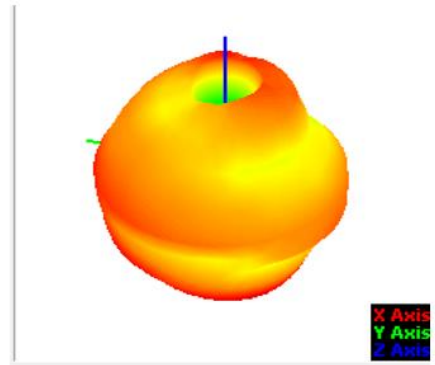
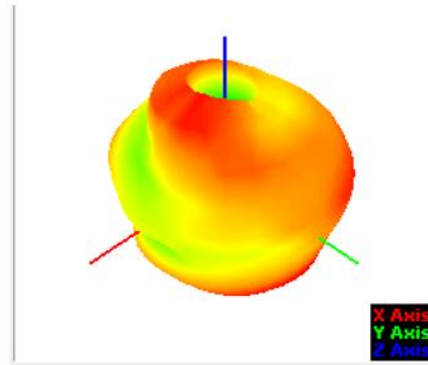
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-28.93
-34.52
-40.11
-45.69
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-62.46
-68.05
-73.64
-79.22
-84.81
-90.4
-95.99



FDD-B4



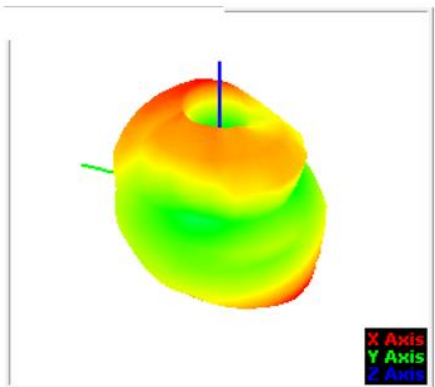
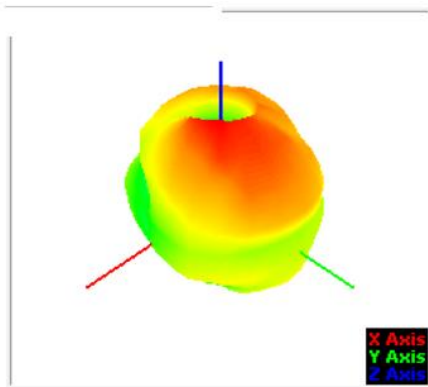
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-34.52
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-68.05
-73.64
-79.22
-84.81
-90.4
-95.99



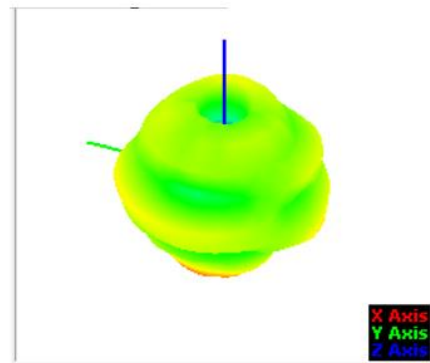
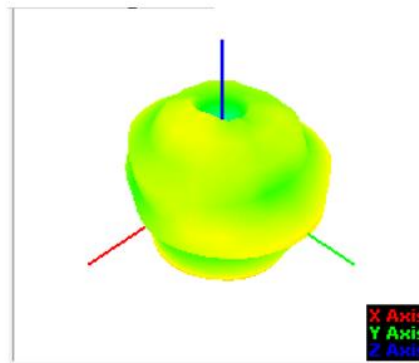
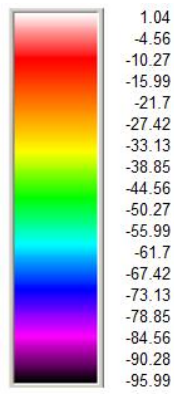
FDD-B5



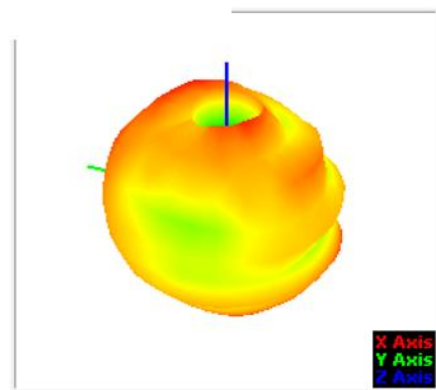
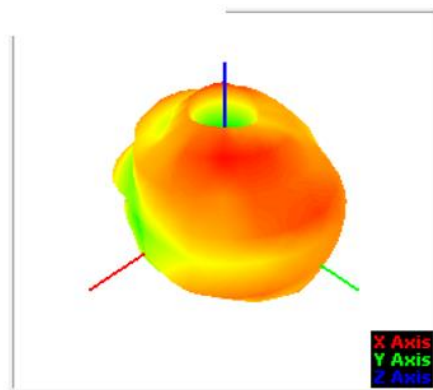
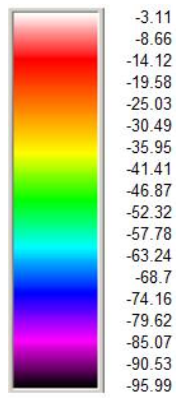
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-24.8
-30.27
-35.75
-41.22
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-74.08
-79.56
-85.04
-90.51
-95.99



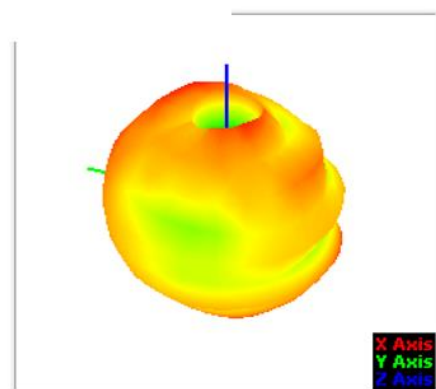
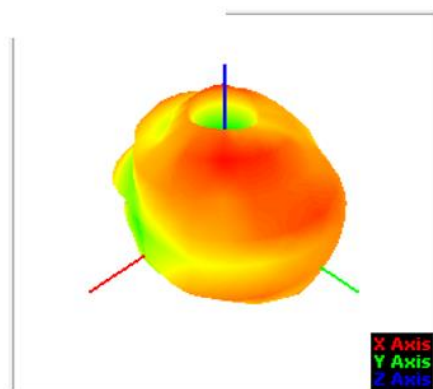
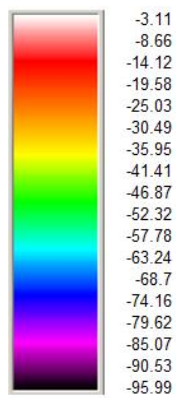
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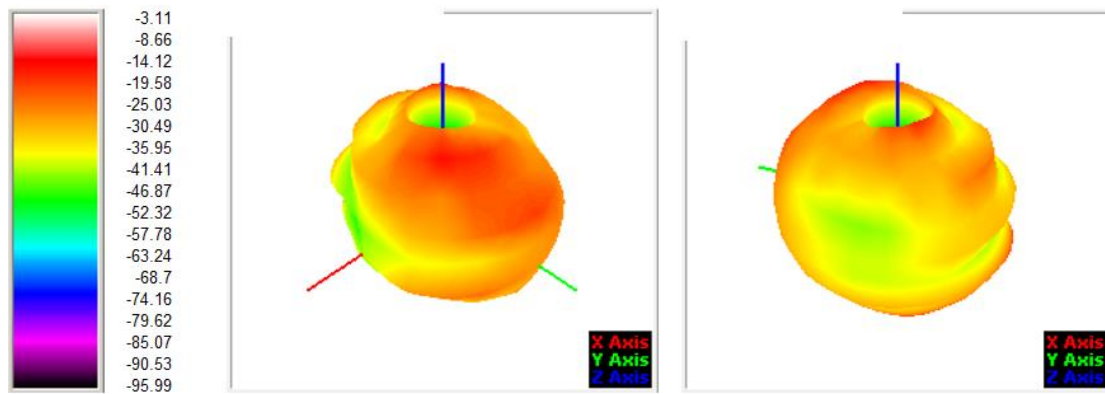
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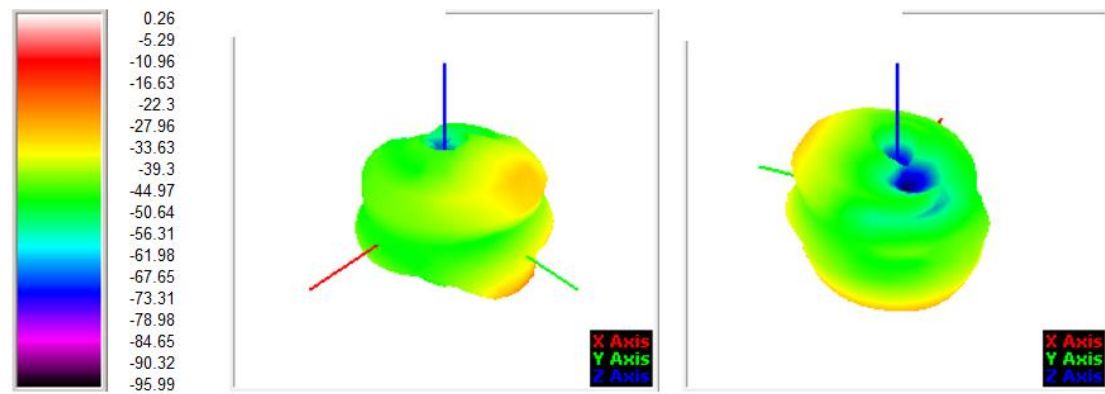
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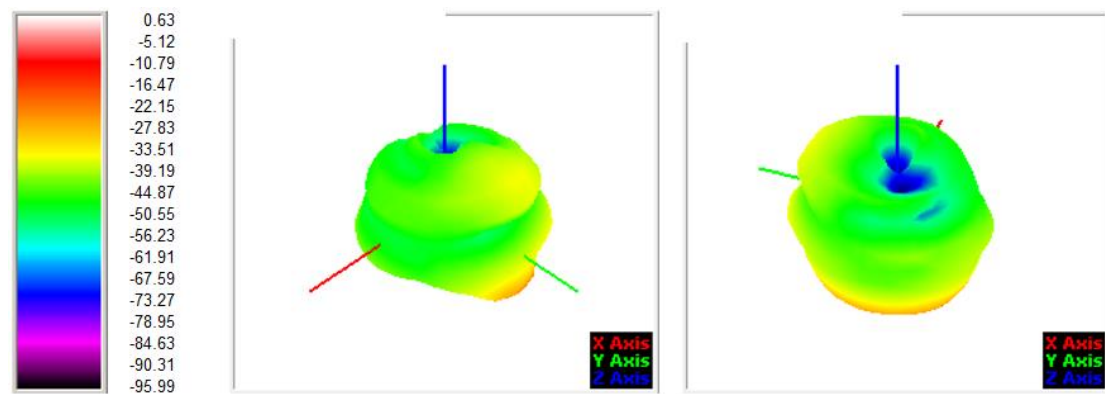
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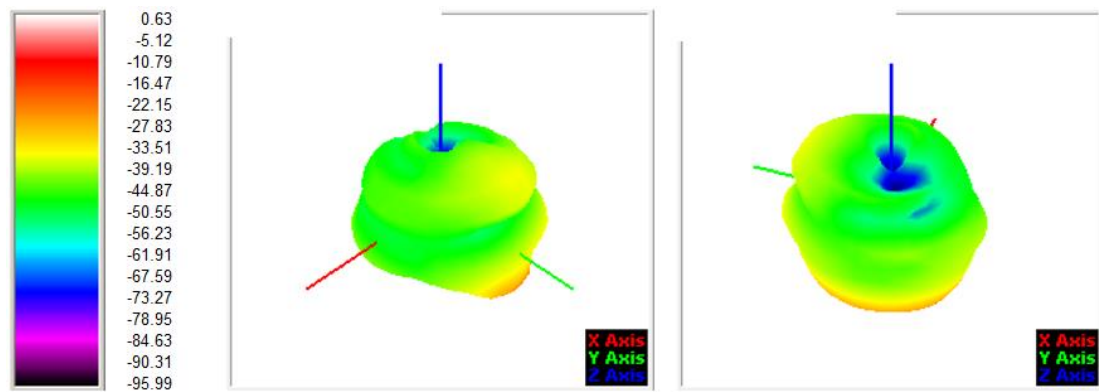
GPS-L1



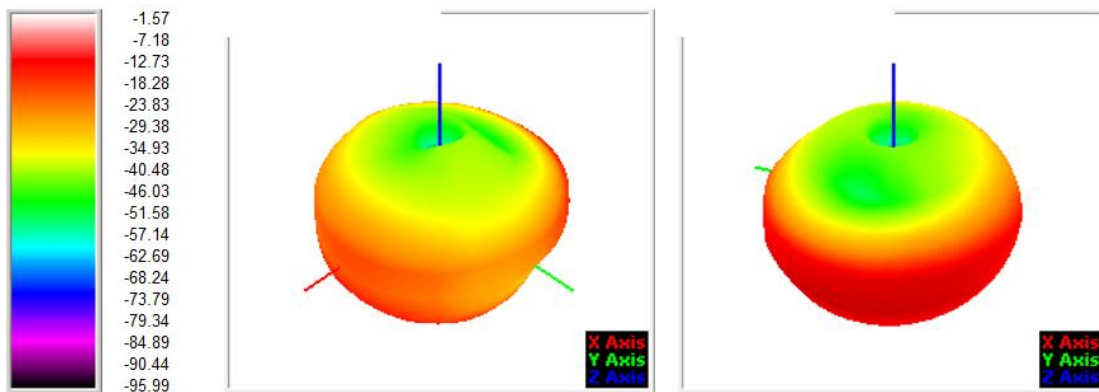
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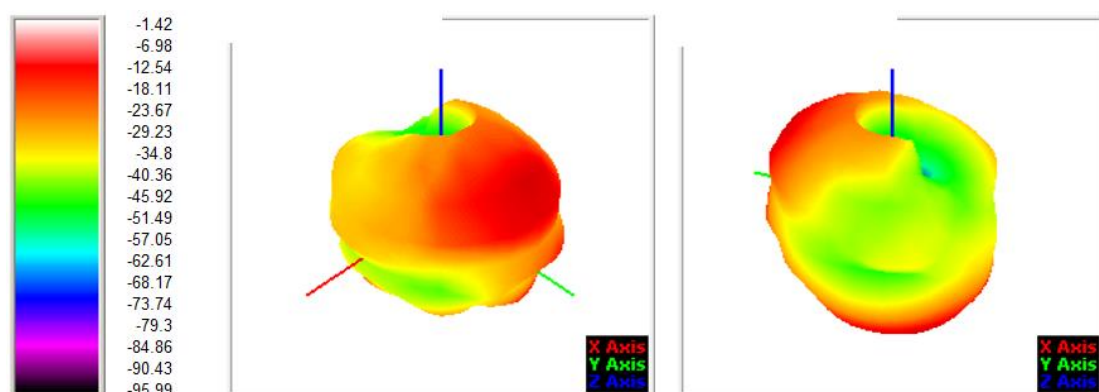
2.4G-WIFI



5.1G-WIFI



5.8G-WIFI



9.Introduction to Antenna Information

S85B5	
Antenna type and frequency band	MAIN ANTENNA(<u>PIFA</u>):2G/3G/4G DIV ANTENNA(<u>PIFA</u>):2G/3G/4G GPS/WIFI/BT ANTENNA(<u>PIFA</u>):L1/2.4GWIFI/5G WIFI/BT
Antenna materia	FPC